

Remarks:

Applicants (hereinafter, Applicant) hereby request reconsideration of the application.

Applicant notes the Examiner's acknowledgement of Applicant's claim for priority under 35 U.S.C. § 119(a)-(d). The Examiner noted that Applicant has not filed a certified copy of the priority application as required by 35 U.S.C. § 119(b). A certified copy of the priority application will be filed as soon as possible, as required by 35 U.S.C. § 119(a)-(d).

In the first paragraph on page 2 of the above-identified Office action, the drawings have been objected to. In response, the legend--Prior Art--has been added to Fig. 2.

Claims 1-13 are now in the application.

In the penultimate paragraph on page 2 of the Office action, claims 1-7 have been rejected as being fully anticipated by Altmann et al. (DE19728845) (hereinafter, "Altmann") under 35 U.S.C. § 102.

In the penultimate paragraph on page 3 of the Office action, claims 8-9 have been rejected as being obvious over Altmann in

view of Brauch et al. (U.S. Pat. No.5,553,088) (hereinafter, "Brauch") under 35 U.S.C. § 103.

In the fourth paragraph on page 4 of the Office action, claims 11-13 have been rejected as being obvious over Altmann in view of Itai (U.S. Pat. No.5,148,441) under 35 U.S.C. § 103.

As will be explained below, it is believed that the claims were patentable over this cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia, a solid-state laser having an active medium for generating a laser beam, comprising:

a pumping light source for generating a pumping light beam whose optical axis is collinear with respect to an optical axis of the laser beam, said pumping light source disposed upstream of said resonator; and

at least one lens functioning as an imaging element for focusing the pumping light beam emerging from one of said

crystal wafers onto another one of said crystal wafers disposed downstream, said lens disposed within said resonator.

(Emphasis added.)

Accordingly, the *present invention* is directed to a solid-state laser having an active medium for generating a laser beam. The laser includes a resonator, and several crystal wafers which are disposed in the resonator and are optically coupled to one another and form a common beam path for the laser beam.

A pumping light source is provided for generating a pumping light beam whose optical axis is collinear with respect to an optical axis of the laser beam. The pumping light source is disposed upstream of the resonator. At least one lens functioning as an imaging element is provided for focusing the pumping light beam emerging from one of the crystal wafers onto another one of the crystal wafers disposed downstream.

The **Altmann** reference discloses a laser amplifier including an active solid-state material. One or more pumping beams are fed via mirrors or other optical devices, so that each individual pumping beam is focused onto different parts of the

material. The laser beam is fed so that all the parts are irradiated and thus amplified.

The solid-state material is composed of several blocks of the same base material, but in part doped and in part undoped, so that the pumping beam is absorbed only in the doped blocks. The blocks are connected together by diffusion bonding after polishing the surfaces, so that the mechanical cohesion is comparable to that of the solid-state material.

Accordingly, Altmann teaches a laser system having a resonator established by mirrors and a plurality of gain media within the resonator in the shape of a disc. However, Altmann reflects laser and pump beams as "astigmatic mirrors with curved surfaces", which are focused on the laser-active medium. The mirrors (6) are located outside of the laser resonator, which is restricted by the layer (4) reflecting the laser beam. See Fig. 1, Altmann.

In contrast, in the instant application, the focusing is accomplished by a lens ("at least one lens"), which is located within the resonator ("within said resonator"). Such a configuration is not disclosed by Altmann or by the other references. Therefore, the subject matter of claim 1 can neither be taught nor suggested by the references.

Clearly, the references do not show "a pumping light source for generating a pumping light beam whose optical axis is collinear with respect to an optical axis of the laser beam, said pumping light source disposed upstream of said resonator; and at least one lens functioning as an imaging element for focusing the pumping light beam emerging from one of said crystal wafers onto another one of said crystal wafers disposed downstream, said lens disposed within said resonator", as recited in claim 1 of the instant application (emphasis added). Thus, neither can the specific combination of the aforementioned limitations be shown.

In other words, the features including the limitations "a pumping light source for generating a pumping light beam whose optical axis is collinear with respect to an optical axis of the laser beam, said pumping light source disposed upstream of said resonator; and at least one lens functioning as an imaging element for focusing the pumping light beam emerging from one of said crystal wafers onto another one of said crystal wafers disposed downstream, said lens disposed within said resonator", as recited in claim 1, attain the present invention's objectives and are not taught or suggested by the references, whether taken alone or in any combination (emphasis added).

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

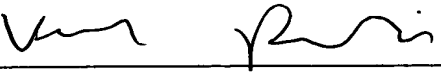
In view of the foregoing, reconsideration and allowance of claims 1-13 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, the Examiner is respectfully requested to telephone counsel so that, if possible, patentable language can be worked out.

Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and

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Respectfully submitted,



For Applicant

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